

WIND CHILL TEMPERATURE INDEX REFERENCE VALUES  
AND ADVISORY COLD STRESS CONDITIONS

Table A4.1. Equivalent Chill Temperature and Cold Stress Conditions. WINDSPEED		TEMPERATURE (F)															
CAL M	CAL M	40	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30	
KNOTS	MPH	EQUIVALENT CHILL TEMPERATURE															
4	5	26	31	25	19	13	7	1	-5	-11	-16	-22	-28	-34	-40		
7 to 10	10	34	27	21	15	9	3	-4	-10	-16	-22	-28	-35	-41			
11 to 15	15	32	25	19	13	6	0	-7	-13	-19	-26	-32	-39				
16 to 19	20	30	24	17	11	4	-2	-9	-15	-22	-29	-35	-42				
20 to 23	25	29	23	16	9	3	-4	-11	-17	-24	-31	-37	-44				
24 to 28	30	28	22	15	8	1	-5	-12	-19	-26	-33	-39					
29 to 32	35	28	21	14	7	0	-7	-14	-21	-27	-34	-41					
33 to 36	40	27	20	13	6	-1	-8	-15	-22	-29	-36	-43					
37 to 41	45	26	19	12	5	-2	-9	-16	-23	-30	-37	-44					
42 to 45	50	26	19	12	4	-3	-10	-17	-24	-31	-38						
46 to 50	55	25	18	11	4	-3	-11	-18	-25	-32	-39						
51 to 53	60	25	17	10	3	-4	-11	-19	-26	-33	-40						
CAUTION																	

Table A4.2. Working Practice Guidance in Cold Environment. Cold Stress Condition	Temperature Range	Required Precautions and Hourly Work/Warming Cycle <sup>a</sup>
1	35 to 16 F ECT	Wear standard issue jacket and gloves, do not perform work for more than 60 minutes if not wearing cold weather gear.
2	15 to -4 F ECT	Follow Condition 1 precautions, no outdoor operations with water (vehicle/aircraft washing), wear gloves and total body protection (cold weather gear), avoid heavy sweating, change wet clothes immediately, Prevent dehydration – water intake: 4 qts/day (sedentary), 5-6 qts/day (active) 50 MINUTES WORK/ 10 MINUTES WARMING
3	-5 to -24 F ECT	Follow Condition 2 precautions, wear mittens not gloves if possible, increase layering of clothing, implement the ‘buddy’ system (two persons should be present during the performance of each open-weather task). 40 MINUTES WORK/20 MINUTES WARMING
4	-25 to -44 F ECT	Follow Condition 3 precautions. Cover all exposed skin. Limit outdoor work to mission essential duties only. 30 MINUTES WORK/30 MINUTES WARMING

a. Warming must be in an indoor, heated environment.  
b. The Squadron Commander will determine which tasks are mission critical.